

2012-1170

NONCONFIDENTIAL

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

SUPREMA, INC. AND MENTALIX, INC.,

Appellants,

v.

INTERNATIONAL TRADE COMMISSION,

Appellee,

and

CROSS MATCH TECHNOLOGIES, INC.,

Intervenor.

On appeal from the United States International Trade Commission in
Investigation No. 337-TA-720.

**NONCONFIDENTIAL BRIEF OF APPELLEE
INTERNATIONAL TRADE COMMISSION**

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Confidential information relating to the Commission's finding of induced infringement by respondents has been redacted from pages 8, 16, 22-25, 28-30, and 39-41 of the Commission's non-confidential brief. This material has been redacted because the material is deemed confidential business information pursuant to 19 U.S.C. § 1337(n); see also 19 C.F.R. § 210.5. The material omitted on those pages was designated as confidential business information by Suprema and Mentalix during the investigation, as well as in their opening brief, and was granted confidential treatment by the Commission.

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STATEMENT OF RELATED CASES

In addition to the cases cited by appellants Suprema, Inc. (“Suprema”) and Mentalix, Inc. (“Mentalix”) (collectively, “Suprema/Mentalix” or “Commission respondents”) in the Statement of Related Cases of their opening brief, the U.S. International Trade Commission (“Commission”) notes that another Commission case, *Certain Electronic Devices with Image Processing Systems, Components Thereof, and Associated Software*, Inv. No. 337-TA-724, Comm’n Op., 2011 ITC LEXIS 2869 (Dec. 21, 2011) (“*Electronic Devices*”), upon which appellants rely in their brief, is currently on appeal to this Court. *See S3 Graphics Co. v. ITC*, No. 2012-1127. While the Commission disagrees with appellants about the relevance of the *Electronic Devices* case to the instant appeal, we note that this Court’s ruling in the appeal of *Electronic Devices* could potentially affect appellants’ arguments here.

STATEMENT OF THE ISSUES

The Commission believes the issues are properly framed as follows:

- (1) Whether the Commission's finding of induced infringement of U.S. Patent No. 7,203,344 ("the '344 patent") is supported by substantial evidence and in accordance with law.
- (2) Whether 19 U.S.C. § 1337 ("section 337") permits the Commission to find a violation based on induced infringement without a separate finding of contributory infringement.
- (3) Whether the Commission Administrative Law Judge ("ALJ") correctly construed the terms "detecting fingerprint area" and "detecting fingerprint shape" as used in the '344 patent.
- (4) Whether the ALJ correctly construed the "optical system" limitation of U.S. Patent No. 5,900,993 ("the '993 patent") as not precluding the use of non-lens elements.
- (5) Whether the ALJ correctly found that appellants failed to establish, by clear and convincing evidence, that the combination of U.S. Patent No. 3,619,060 ("the '060 patent") and U.S. Patent No. 5,615,051 ("the '051 patent") renders the '993 patent invalid due to obviousness when this combination of prior art fails to disclose the claimed "first lens unit" limitation.

STATEMENT OF THE CASE

I. NATURE OF THE CASE AND PROCEDURAL BACKGROUND

This appeal is from the Commission's final determination finding a violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, in the investigation entitled *Certain Biometric Scanning Devices, Components Thereof, Associated Software, and Products Containing the Same*, USITC Inv. No. 337-TA-720, with respect to claims 10, 12, and 15 of the '993 patent regarding accused products RealScan-10/10F and claim 19 of the '344 patent. A23-26, A243-45, A209-41, A204. The Commission instituted the underlying investigation based on a complaint filed by Cross Match Technologies, Inc. ("Cross Match") alleging a violation of section 337(a)(1)(B)(i) in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain biometric scanning devices, components thereof, associated software, or products containing the same by reason of, *inter alia*, infringement of certain claims of the '993 and '344 patents.¹

On June 17, 2011, the presiding ALJ issued his final initial determination ("ID") in the investigation, in which he found a violation of section 337 by

¹ Two other patents, U.S. Patent Nos. 6,483,932 ("the '932 patent") and 7,277,562 ("the '562 patent"), were asserted in the investigation. The '932 patent was withdrawn from the investigation and the '562 patent was found non-infringed. A23-26; A37.

Commission respondents Suprema and Mentalix based on infringement of claims 10, 12, and 15 of the '993 patent and claim 19 of the '344 patent regarding certain accused products. A203. On August 18, 2011, the Commission issued a notice determining to review-in-part the ALJ's final ID. A23-26. On October 24, 2011, the Commission issued a notice and opinion modifying the ALJ's final ID and terminating the investigation with a finding of a violation of section 337 as to the above-mentioned claims and accused products. A243-45, A209-41. Suprema/Mentalix filed an appeal to this Court on January 20, 2012. Google Inc. ("Google") filed an amicus brief on May 14, 2012.

As relevant to this appeal, Suprema/Mentalix's challenge to the Commission's finding of induced infringement of claim 19 of the '344 patent by Suprema is limited to two issues – (1) whether, under *Electronic Devices* or otherwise the Commission can base a violation on induced infringement only if it also finds contributory infringement; and (2) whether the knowledge prong of inducement has been satisfied. *See* Br. 17-32. Neither appellants nor Google dispute the correctness of the Commission's analysis regarding the second prong of induced infringement – aiding and abetting Mentalix's direct infringement. Thus, the Court need not consider this issue and accordingly it is not discussed in detail herein.

In addition, Mentalix/Suprema do not dispute that there is direct infringement of the '993 and '344 patents under the contested Commission claim constructions. *See* Br. 64. Rather, they appeal only the correctness of the Commission's claim constructions with respect to infringement of these patents.

II. STATEMENT OF THE FACTS

A. Background

1. Technology

The parties to the Commission investigation jointly stipulated to the technology at issue in the investigation. *See* A40-41(*citing* A103228-33); *see also* A288:1:25-2:11; A316:1:19-67; A257:1:5-44. Pursuant to their joint stipulation, the technology at issue pertains to biometrics, the science of analyzing biological characteristics, and the scanning of biometric objects such as fingers. A103229. A biometric is a measurable, physical characteristic used to recognize the identity, or verify the claimed identity, of a person who has a biometric reference template (*e.g.*, data that represents a biometric measurement) on file. Fingerprint capture and recognition is an important biometric technology since many industries, *e.g.*, law enforcement, increasingly rely upon fingerprints as a biometric to store, recognize, or verify identity. A288:1:25-44; A316:1:19-38.

The biometric fingerprint scanner uses an optical system to obtain images of fingerprints. An important feature of the optical system is to form a real image of the object, *i.e.*, fingerprint, being captured. An optical system commonly comprises a light source to illuminate an object, multiple lens units arranged along an optical axis to deflect and focus the light, and an aperture stop, *i.e.*, diaphragm, to help form the image of the object. A103229-33. A lens unit has two optical surfaces and is classified, either positive or negative, by the curvature of the two optical surfaces. Another concept in optical systems is telecentricity. In a telecentric system, the center ray of every light ray bundle is parallel to the axis on the object side, image side, or both. *Id.*; *see also* A257:1:11-23.

An automatic fingerprint identification system (AFIS) is one type of biometric imaging system which can be used by law enforcement to collect fingerprint images from those arrested. One type of AFIS input device is a ten-print scanner which typically requires each finger to be imaged using a roll print technique. The ten-print scanner commonly uses a surface known as a "platen" to capture fingerprints. Each finger is identified, prior to imaging, as it is placed on the platen. A288:1:45-67; A316:1:39-63. However, the process of rolling each finger to obtain prints during an arrest or background check is a relatively complex and time-consuming process. A103229; A288:1:45-67; A316:1:39-67.

2. Patents

The '993 patent issued on May 4, 1999, and expires on May 9, 2017. It pertains to an optical system for forming a real image of a biometric object that corrects for field curvature using a three-lens system. A261:10:19-45. The '344 patent issued on Apr. 10, 2007, and expires on Jan. 17, 2022. It pertains to a method used by an optical scanning system for detecting fingerprint images based on shape and area, and determining fingerprint quality based on the detected shape and area. A297:19:24-38.

3. Products

Suprema manufactures and imports hardware and software for scanning fingerprints. A103229. Mentalix imports Suprema's scanners for integration with Mentalix's software in the United States. A37; A103241-42. Mentalix's accused software can be used with fingerprint scanners sold by other companies, including Suprema. In the Commission investigation, Cross Match contended that the '993 and '344 patents are infringed by Suprema's hardware and both respondents' software. A102; A120. Suprema's accused products use optical systems, including a light source and a sensor, to obtain images of fingerprints, and a platen for capturing fingerprints. The accused scanners use a series of optical elements to focus light to obtain an image of the fingerprint and a camera to scan the

fingerprint image. Suprema provides software development kits (SDKs) that allow customers to create their own software to operate the scanner. The SDKs include dynamic link libraries (dlls) that include functions that operate various features of the accused fingerprint scanners. A41. The SDKs also include manuals instructing customers on how to use the SDK. *Id.* Suprema was accused of infringing the asserted '993 and '344 patents by reason of the sale and importation of its scanners with the SDKs. A39-41; A102; A120. Mentalix was accused of infringing the '344 patent when it integrates its FedSubmit software with Suprema's imported scanners. A120.

B. Relevant Commission Findings

1. Induced Infringement of the '344 Patent

Claim 19 of the '344 patent reads, in relevant part, as follows:

19. A method for capturing and processing a fingerprint image, the method comprising:

....

(e) detecting a fingerprint area **based on a concentration of black pixels in the binarized fingerprint image;**

(f) detecting a fingerprint shape **based on an arrangement of the concentrated black pixels in an oval-like shape in the binarized fingerprint image**

A297:19:24-37 (emphasis added).

**CONFIDENTIAL INFORMATION
DELETED**

In his final ID, the ALJ found that a number of Suprema's accused products (*i.e.*, RealScan-10, RealScan-D, RealScan-10F, and RealScan-DF), when operated and used with Mentalix's FedSubmit software, infringe claim 19 of the '344 patent to support a section 337 violation with respect to this patent. A133 n.15; A136. In its opinion, the Commission modified and supplemented the ID to identify the infringers and the theory of infringement. A212, A220-33. The Commission found that the record evidence supported a finding that Suprema induced direct infringement by Mentalix in accordance with 35 U.S.C. § 271(b). *Id.*

The Commission found it undisputed that Mentalix's FedSubmit software integrated with the imported Suprema scanners directly infringed, upon execution of the software, under the Commission's claim construction, thereby satisfying the direct infringement requirement for inducement. A213-14, A220-21 (*citing Glenayre Elecs., Inc. v. Jackson*, 443 F.3d 851, 858 (Fed. Cir. 2006)). The Commission also found that Suprema deliberately studied Cross Match, its patents [[]], and then "willfully blinded" itself to the infringing nature of Mentalix's activities, which it had actively encouraged to satisfy both the knowledge and "aiding and abetting" prongs of inducement. A220-33 (*citing DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1305 (Fed. Cir. 2006) (specific intent and action to induce infringement must be shown); *Global-Tech Appliances, Inc. v.*

SEB S.A., 131 S. Ct. 2060, 2070-71 (2011) (the knowledge requirement for inducement may be satisfied by the doctrine of “willful blindness” where the inducer “takes deliberate actions to avoid confirming a high probability of wrongdoing” and therefore “can almost be said to have actually known the critical facts”)).

Based on the foregoing, along with the record evidence clearly showing the collaborative efforts between Suprema and Mentalix to infringe claim 19, the Commission found a violation of section 337 by respondents based on induced infringement. *Id.*

2. Direct Infringement of the '344 Patent

The Commission adopted the ALJ's claim construction and infringement findings regarding steps 19(e), “detecting fingerprint area,” and 19(f), “detecting fingerprint shape.” Regarding step (e), the Commission noted that the parties had agreed that the plain language of this recited step, “detecting a fingerprint area based on a concentration of black pixels in the binarized fingerprint image,” is sufficiently clear to not warrant construction. A127-28.

Regarding step (f), “detecting a fingerprint shape based on an arrangement of the concentrated black pixels in an oval-like shape in the binarized fingerprint image,” the Commission found that the process of creating a bounding box, as

analyzed with respect to step (e), also detects a fingerprint shape as required by the claim language. A131. The Commission noted its earlier construction of similar step (c) of claim 1, *i.e.*, “using concentrations of black pixels arranged in oval-like shapes in the combined image to determine individual fingerprint areas and shapes,” to mean “identifying concentrations of black pixels, which have oval-like shapes, to determine individual fingerprint areas and shapes.” *Id.*; A88-90. From the intrinsic record, the Commission had found that a person of ordinary skill in the art would understand that the limitation only requires *using* concentrations of black pixels arranged in oval-like shapes, and does not require that “oval-like pixel concentrations be *identified*.” A88-90 (emphasis in original). Accordingly, the Commission found that the concentrations of black pixels need only be comprised of oval-like shapes and that a determination of infringement does not require a calculation or determination of whether anything is oval-like. A131.

Based on the foregoing, the Commission found that Cross Match established, by a preponderance of the evidence, that steps 19(e) and 19(f) are practiced by the accused products using Mentalix’s FedSubmit software. A127-31. Because all other claim steps were satisfied, the Commission found that Cross Match had shown, by a preponderance of the evidence, that the accused Suprema

products, when operated and used with Mentalix's FedSubmit software, infringe claim 19 of the '344 patent. A133.

3. Infringement of the '993 Patent

Claim 10, in relevant part, reads:

10. **An optical system** having an optical axis, said system forming an image of an object and comprising:

....

(c) a first lens unit having a positive power **between the aperture stop and the prism** for forming a telecentric entrance pupil;

(d) a second lens unit having a positive power for forming a real image of the object, said second lens unit being on the image side of the first lens unit

A261:10:18-34 (emphasis added).

The Commission adopted the ALJ's claim construction and infringement findings regarding "optical system" and all recited claim elements including "between the aperture stop and the prism." A24. Undisputed by the parties, the Commission noted the following: (1) an "optical system" includes "the widest designation for a group of optical elements that may comprise lenses, prisms, refractive optical elements, mirrors, gratings, holographic optical elements, distortion correcting prisms, non-lens elements, and filters;" (2) the plain meaning of the claim term "optical system" is a "collection of optical elements in a specified configuration to act on light;" and (3) the "optical system" of claim 10 may include

both lens and non-lens elements. A58. From the intrinsic record, the Commission additionally found that no portion of the claim limits the type of elements that may be included in the claimed “optical system.” A59. Therefore, the Commission found that each element (a) through (e) of the “optical system” can include one or more elements from the common meaning of optical system, *e.g.*, non-lens elements, off-axis optics, distortion correcting prisms, and holographic optical elements. A59-62.

Accordingly, the Commission construed the term “optical system” to mean “a collection of optical elements in a specified configuration to act on light” and not to exclude non-lens elements, distortion correcting prisms, holographic optical elements, or off-axis optics. *Id.* Based on this construction, the Commission concluded that this and all other recited elements of claim 10 (and dependent claims 12 and 15) were met by the accused scanner products to establish infringement. A112-14.

4. Non-Obviousness of the '993 Patent

Suprema/Mentalix asserted that the '993 patent was obvious in view of the combination of the '060 and '051 patents. A144. The '060 patent, entitled “Identification Device,” discloses a system that uses an optical apparatus to compare an object, *i.e.*, a fingerprint, with a preselected image to perform

identification. A302022:Abstract; 302026:1:3-5. The device includes a source of parallel light beams, a prism having a face for receiving the light beams and having another face for receiving an object to be identified, an apparatus for receiving an image of the object, and additional apparatus for comparing the image of the object with a known image. A302026:1:31-2:19. The device further includes a lens **14**, located between the light source **12** and the prism **18**, for deflecting light into parallel light beams and an achromatic lens **28**, located between the prism and a diaphragm (aperture stop) **30**, for focusing light reflected by the prism through the diaphragm onto an inclined focal plane **32**. A302022:Abstract; A302023:Fig. 1; A302026-27:2:74-3:52.

The '051 patent discloses a three-lens system, *i.e.*, triplet, for use with photographic cameras. The triplet comprises, in order from the object side, a first positive lens unit, a second negative lens unit, a third positive lens unit, and an aperture stop. A301995:Fig. 1, A301999:1:5-8, 63-67-2:7.

Based on the evidentiary record, the ALJ found that the Commission respondents failed to offer clear and convincing evidence that the combination of the '060 and '051 patents renders asserted independent claim 10, as well as asserted dependent claims 11-12, 15, and 17-18, of the '993 patent obvious under section 103(a). A151-54. Regarding element (c) of claim 10, *i.e.*, a first lens unit

having positive power between the aperture stop and the prism for forming a telecentric entrance pupil, the ALJ found that the '060 patent discloses lens **14** that creates a telecentric condition, and lens **28** that is located between prism **18** and an aperture stop **30**. A146; A302023:Fig. 1, A302027:3:1-3, 38-40. However, he found that the '060 patent does not disclose whether lens **14** or lens **28** has a positive power or a negative power. *Id.* Based on the foregoing, the ALJ found that the '060 patent does not disclose element 10(c), element 10(d) (a second lens unit having a positive power for forming a real image of the object), or element 10(e) (a third lens unit for correcting field curvature), because the prior art patent only discloses two lens units. A146-47.

The ALJ also noted that although the '051 patent discloses a triplet lens system well-suited for use on photographic cameras, it is undisputed that the '051 patent does not disclose a telecentric lens system. A151-53; A200505:1836; A301998:Figs. 7-8. He further found that the '060 patent does not satisfy element (c) of claim 10, a first lens unit having positive power between the aperture stop and the prism for forming a telecentric entrance pupil, because lens **14** of the '060 patent is not disclosed to have positive power. A151-53. Therefore, the ALJ found that substitution of the triplet lens system of the '051 patent into the device

of the '060 patent would not disclose a first lens unit as in element (c) of claim 10 of the '993 patent. *Id.*

Based on the foregoing, the ALJ concluded, and the Commission agreed, that the combination of the '060 and '051 patents does not render claim 10 (and therefore any dependent claims) of the '993 patent obvious by clear and convincing evidence. *Id.*; A23-26.

SUMMARY OF ARGUMENT

The Commission's determination that Suprema and Mentalix violated section 337 with respect to claims 10, 12, and 15 of the '993 patent, and claim 19 of the '344 patent, should be affirmed. Underlying this determination are the Commission's infringement and non-invalidity findings as to the '993 patent, and its infringement finding as to the '344 patent, all of which are supported by substantial evidence and in accordance with law.

1. The Commission's finding that claim 19 of the '344 patent is infringed via inducement by Suprema, and directly infringed by Mentalix, is supported by substantial evidence and in accordance with law. Mentalix did not dispute that it directly infringes claim 19 under the Commission's claim construction. Further, the record evidence clearly showed that the Suprema "willfully blinded" itself to knowledge of the '344 patent – despite having in its

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possession the asserted '562 patent which incorporates by reference the patent application leading to the '344 patent, and that Suprema "aided and abetted" Mentalix's direct infringement. *See Global-Tech*, 131 S. Ct. at 2070-71. The record evidence also demonstrated that Suprema deliberately studied Cross Match's patents [[]] in order for Suprema to develop its own products, and undertook collaborative efforts with Mentalix to infringe the '344 patent through the integration of Mentalix's FedSubmit software into the imported Suprema scanners.

2. Nothing in the statute nor the Commission's precedent supports appellants' argument that a violation of section 337 based on induced infringement is contingent on also finding contributory infringement. Nor does the Commission's final determination in *Electronic Devices* overturn the undisturbed Commission precedent that indirect infringement, including inducement alone, can serve as the basis for a violation of section 337. The Commission's determination and legislative history clearly indicate that the violation of section 337(a)(1)(B)(i) at issue here, *i.e.*, importation, sale for importation, or sale within the United States after importation, of articles that infringe, can be based solely on any individual theory of indirect infringement.

3. The Commission's findings that asserted claims 10, 12, and 15 of the '993 patent, and claim 19 of the '344 patent, are directly infringed by the accused scanners are supported by substantial evidence and in accordance with law. The Commission correctly construed "detecting a fingerprint area" and "detecting a fingerprint shape" of claim 19 of the '344 patent to not exclude using a bounding box to determine shape and area. From the plain language of these claim limitations and the specification, the Commission properly found that a person of ordinary skill in the art would understand that these limitations only require *using* concentrations of black pixels arranged in oval-like shapes, and does not require oval-like pixel concentrations be *identified*. There is nothing in the intrinsic record that requires a calculation or determination of whether anything is oval-like to determine fingerprint area and shape.

4. Likewise, the Commission construed the '993 patent terms at issue here, *i.e.*, "optical system" and recited elements 10(c)-(e) including "between the aperture stop and the prism," consistently with the intrinsic record, including the claim language and the specification. Each term is particularly defined in the specification as part of the claimed invention. Specifically, the Commission correctly construed the term "optical system" of claim 10 of the '993 patent to mean a "collection of optical elements in a specified configuration to act on light,"

which may include both lens and non-lens elements including “between the aperture stop and the prism.” The Commission properly noted that “optical system” has a very broad meaning to one of ordinary skill in the art and that the specification, including the objects of the invention, made no specific disclaimer to exclude non-lens elements “between the aperture stop and the prism” from the scope. Rather, the specification makes it clear that non-lens elements, distortion correcting prisms, holographic optical elements, and off-axis optics may be included in every element of the claimed “optical system.” Under the above claim constructions, it is undisputed that the ’993 and ’344 patents are directly infringed by the Commission respondents’ accused products.

5. Finally, the Commission, adopting the ALJ’s findings, properly found that Suprema/Mentalix failed to prove, by clear and convincing evidence, that the asserted claims are obvious in view of the asserted prior art. Suprema/Mentalix simply failed to show how the prior art disclosed the claimed element of “a first lens unit having positive power between the aperture stop and the prism for forming a telecentric entrance pupil.” There is nothing in the asserted prior art that clearly and convincingly discloses this element. *See Hologic, Inc. v. SenoRx, Inc.*, 639 F.3d 1329, 1338-39 (Fed. Cir. 2011); *Hockerson-Halberstadt, Inc. v. Avia Group Int’l*, 222 F.3d 951, 956 (Fed. Cir. 2000). In addition, Suprema/Mentalix

failed to show how one of ordinary skill in the art would have been motivated to combine separate, distinct references – a lens system for a fingerprint detection device and a camera lens system – into an operable optical system for fingerprint detection when the camera lens system makes no mention of forming the claimed telecentric entrance pupil.

ARGUMENT

I. STANDARD OF REVIEW

Claim construction is an issue of law, and infringement, whether direct or indirect, is a question of fact. *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 850 (Fed. Cir. 2010); *Schindler Elevator Corp. v. Otis Elevator Co.*, 593 F.3d 1275, 1281 (Fed. Cir. 2010). In turn, the Commission's factual findings are reviewed for substantial evidence, whereas its legal determinations are reviewed *de novo*. 19 U.S.C. § 1337(c); 5 U.S.C. § 706(2)(E); *Intel Corp. v. U.S. Int'l Trade Comm'n*, 946 F.2d 821, 834 (Fed. Cir. 1991).

II. THE COMMISSION'S DETERMINATION THAT THE COMMISSION RESPONDENTS VIOLATED SECTION 337 WITH RESPECT TO THE '344 PATENT IS SUPPORTED BY SUBSTANTIAL EVIDENCE AND IN ACCORDANCE WITH LAW

A. The Commission Correctly Determined That Suprema Induced Mentalix's Direct Infringement of the '344 Patent

Infringement may be indirect as “[w]hoever actively induces infringement of

a patent shall be liable as an infringer.” *See* 35 U.S.C. § 271(b). However, there can be no indirect infringement unless there is direct infringement. *Glenayre Elecs.*, 443 F.3d at 858.

“To establish liability under section 271(b), a patent holder must prove that once the defendants knew of the patent, they actively and knowingly aid[ed] and abett[ed] another’s direct infringement.” *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1305 (Fed. Cir. 2006) (*en banc*) (emphasis omitted). Specific intent and action to induce infringement must be proven, as “mere knowledge of possible infringement by others does not amount to inducement.” *Id.*; *see also Cross Med. Prods. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1312 (Fed. Cir. 2005) (““In order to succeed on a claim of inducement, the patentee must show, first that there has been direct infringement, and second, that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another’s infringement.””). Induced infringement may be established by circumstantial evidence. *See Golden Blount, Inc. v. Robert M. Peterson Co.*, 438 F.3d 1354, 1362-63 (Fed. Cir. 2006).

The knowledge requirement for induced infringement may be satisfied by actual knowledge or the doctrine of “willful blindness.” *See Global-Tech*, 131 S. Ct. at 2070-71 (“a willfully blind defendant is one who takes deliberate actions to

avoid confirming a high probability of wrongdoing and who can almost be said to have actually known the critical facts;" "merely a 'known risk' that the induced acts are infringing" is insufficient to establish knowledge of infringement).

The Commission's finding that Suprema induced direct infringement of claim 19 of the '344 patent by Mentalix was supported by substantial evidence and in accordance with law.

1. Appellants Do Not Dispute the Facts That Support the Commission's Determination That Suprema Aided and Abetted Mentalix's Direct Infringement

The record evidence showed, and appellants do not dispute, that Mentalix integrated its FedSubmit software with the imported Suprema scanners and SDK software to produce a resulting scanner system that practices claim 19. Nor do they dispute that, assuming the correctness of the Commission's claim construction (discussed *infra*), Mentalix directly infringed claim 19 by providing training and demonstrations of its integrated scanner system to the U.S. Census Bureau. *See* Br. 17-32; A301966:19, A301973-74:48-51, A301975-78:57-68, A301988:122-23; A103011 ("Respondents do not dispute that Mentalix has used FedSubmit in conjunction with a [Suprema] RealScan-10 scanner and RealScan-D scanner."). Accordingly, Mentalix was a direct infringer and therefore in violation of section 337. Furthermore, Suprema indirectly infringed by inducing Mentalix's direct

infringement as demonstrated by the record evidence showing that both inducement criteria were satisfied (*i.e.*, knowledge and “aiding and abetting” another’s direct infringement). *See Kyocera Wireless Corp. v. U.S. Int’l Trade Comm’n*, 545 F.3d 1340, 1352-54 (Fed. Cir. 2008).

2. Substantial Evidence Supports the Commission’s Determination That the Knowledge Requirement Was Satisfied by the Doctrine of “Willful Blindness”

The doctrine of “willful blindness” requires that: (1) the alleged infringer must subjectively believe that there is a high probability that a fact exists; and (2) the defendant must take deliberate actions to avoid learning that fact. *Global-Tech*, 131 S. Ct. at 2070. Applying that standard here, the record evidence shows that Suprema satisfied the knowledge requirement for inducement. Specifically, Suprema deliberately studied Cross Match’s patents [[]], and then “willfully blinded” itself to the infringing nature of Mentalix’s activities which it had actively encouraged. *See Global-Tech*, 131 S. Ct. at 2070-71; *DSU*, 471 F.3d at 1305-06.

As the record evidence demonstrates, Suprema perceived [[]]. Indeed, when Suprema began to develop its own live scanner product, it admittedly engaged in market research on its

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competitors [[]].² See A200329:1138-39), A200330-31:1143-46; A303829-30:129-30, A303844-45:182-87; A303333; A301868:148; A301870:154, A301923:361; A303292; A303011-15; A303236-46; A303754-56:9-14, A303763:42-43; A302963. [[

]] See A303829-30:129-30;

A303292. To aid in the achievement of this goal, Suprema, [[

]] See A303763:42-43; A301870:154;

A302963. The record evidence showed that Suprema carefully examined the

[[]] products in order to emulate their functionalities. See A302988-89 [[

]] Ultimately,

Suprema succeeded in developing into its scanners the autocapture, image quality checking, and automatic segmentation processes that are covered by the '344 patent. See A300031-32; A303233-34; A303754-55:9-13, 303763:42-43

² Suprema's Executive VP of Research and Development (Mr. Song) stated that [[

]] See A200329:1138).

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(Suprema's Chief Research Engineer for the development of the Real-Scan product testified that [[

]].

Further, Suprema admitted to researching and identifying Cross Match's patents, including the '932 and '562 patents (both previously asserted in the underlying Commission investigation), [[

]] *See* A200329:1138;

303844:183-85 [[

]]

Specifically, in [[]] Suprema downloaded and analyzed the '562 patent which incorporates by reference in three separate portions of its specification the patent application (U.S. Patent Ser. No. 10/345,420) that led to the '344 patent. *See* A316:1:11-14, A318:5:30-34, 39-42, 64-67; A303554; A200330-31:1143-46. In the "Cross-Reference to Related Applications" section at the beginning of the written disclosure, the '562 patent states that "[t]he present application is related to U.S. patent application Ser. No. 10/345,420 and U.S. patent application Ser. No. 10/345,366, both filed on Jan. 16, 2003, which are

incorporated by reference in their entireties.”³ See A316:1:11-14. This incorporation-by-reference language is similarly repeated three separate times in column 5 of the written description. See A318:5:30-34, 39-42, 64-67 (“U.S. patent application Ser. No. 10/345,420 and U.S. patent application Ser. No. 10/345,366, which are incorporated by reference herein in their entireties.”). The ’562 and ’344 patents also have overlapping inventors and share the same assignee, Cross Match, so a word search would have identified both patents. A265; A303.

Therefore, the record evidence demonstrates that Suprema was well-aware of [[] along with Cross Match’s relevant ’562 patent, in order to develop Suprema products. See A316:1:11-14, A318:5:30-34, 39-42, 64-67; A200329:1138-39, A200330-31:1143-46; A303829-30:129-30, A303844-45:182-87; A303333; A301868:148, A301870:154, A301923:361; A303292; A303011-15; A303236-46; A303763:42-43; A302963. Despite the overwhelming evidence demonstrating Suprema’s knowledge that Cross Match had multiple patents in the biometric scanning field, Suprema asserted during the investigation that it did not check to see if the related patent application referenced in the ’562 patent had ever matured

³ The ’344 patent issued in April 2007, six months prior to the October 2007 issue date of the ’562 patent. See A265; A303.

into an issued patent. *See* A103000-08. This amounts to nothing less than deliberate avoidance of acquiring knowledge of the '344 patent.

Also telling is Suprema's failure to obtain opinion of counsel in the face of knowing of this patent application. Such an opinion undoubtedly would have uncovered the '344 patent, the fact that both the '344 and '562 patents are assigned to Cross Match, and would have analyzed whether Suprema infringed any of the Cross Match patents. *See* A200329:1138-39, A200330-31:1143-46; A303829:129-30, A303844-45:182-87; A303333; A301868:148, A301870:154, A301923:361; *see, e.g., Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 698-701 (Fed. Cir. 2008).

Thus, substantial evidence supports the Commission's finding that Suprema subjectively believed or knew there was a high probability that Cross Match's scanner technology was patented. As such, Suprema was aware of the likelihood that the scanner products it was developing would be covered by Cross Match's patents, but took steps to avoid learning for certain that they were. *See Global-Tech*, 131 S. Ct. at 2071-72. Suprema willfully blinded itself to the evidence of the existence of '344 patent and therefore deliberately shielded itself from the nature of the infringing activities it actively encouraged and facilitated Mentalix to perform. *Id.* Accordingly, substantial evidence supports the Commission's finding that

Suprema was “willfully blind” to uncovering the ’344 patent. Suprema’s conduct therefore met the knowledge requirement for inducement under *Global-Tech*, and together with the undisputed facts that Suprema “aided and abetted” direct infringement by Mentalix, substantial evidence supports the Commission’s induced infringement finding. *See* A103011; Br. 17-32.

3. Appellants’ and Google’s Arguments Are Unavailing as the Commission Properly Applied *Global-Tech* to Find “Willful Blindness”

The record evidence here clearly supported a finding of “willful blindness” by Suprema as to its knowledge of the ’344 patent. The Commission’s application of *Global-Tech* is wholly consistent with the approach followed by the federal district courts when applying that Supreme Court precedent. In particular, at least two district courts have held that the alleged infringer’s knowledge of its patentee competitors is a strong factor towards inferring knowledge (or willful blindness) of the patentee’s patents in the relevant industry. *See ePlus, Inc. v. Lawson Software, Inc.*, Civ. No. 3:09cv620, 2011 U.S. Dist. LEXIS 89950, at *15-18 (E.D. Va. Aug. 11, 2011); *Weiland Sliding Doors, Inc. v. Panda Windows, LLC*, Case No. 10CV677, 2012 U.S. Dist. LEXIS 7021, at *13-14 (S.D. Cal. Jan. 23, 2012).

Further, appellants’ (Br. 24-32) and Google’s (Br. 6-22) efforts to limit *Global-Tech*’s holding regarding “willful blindness” to the same facts as that case

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are misplaced. *See In re Staats*, 671 F.3d 1350, 1355 (Fed. Cir. 2012) (the Court, citing Supreme Court precedent, recognizing that “the ‘necessary implications’ of a case’s holding are ‘of course not limited to the facts of that case.’”) (*quoting Herb’s Welding, Inc. v. Gray*, 470 U.S. 414, 442 (1985)). Indeed, an application of the *Global-Tech* legal holding to the facts here plainly demonstrates that the standard for inducement has been met here. It is undisputed that Suprema studied competitor Cross Match’s [[]] patents to compete in the biometric scanner industry. *See* A303829-30:129-30, A303844:183; A303554; A303233-34; A200330-31:1143-46; A303292; A303763:42-43; A302960-63; A301870:154; A302988-89. Suprema’s study and market research of [[

]] included the downloading of Cross Match’s patents and careful examination of [[]] in order to emulate them. *See* A200329:1138-39, A200330-31:1143-46; A303829-30:129-30, A303844-45:182-87; A303333; A301868:149, A301870:154, A301923:361; A303292; A303011-15; A303236-46; A303763:42-43; A302960-63; A301870:154; A303233-34; A303554. Accordingly, consistent with the teachings of *Global-Tech* and other precedent, the Commission properly found that Suprema “willfully blinded” itself to the infringing nature of its and Mentalix’s activities since it had extensively

studied the relevant patents [[]] of its competitor, [[]] and thus deliberately avoided confirming knowledge of the '344 patent.

In *Global-Tech*, the Supreme Court analogized to criminal law to emphasize that knowledge could be established by showing willful blindness. *See Global-Tech*, 131 S. Ct. at 2068-69. In other words, defendants, or alleged patent infringers, cannot “escape the reach of [the relevant statute] by shielding themselves from clear evidence of critical facts that are strongly suggested by the circumstances.” *Id.* While the Supreme Court thus looked to criminal law to fashion the willful blindness standard for induced infringement, this does not mean, as Google suggests (Br. 7-12), that a finding of willful blindness with respect to inducement requires the same standard of criminal intent/conduct that is necessary to prove willful blindness in the criminal context. In other words, complainant Cross Match did not need to prove “beyond a reasonable doubt” that Suprema's conduct “transcended recklessness and negligence,” in order to show the willful blindness necessary to support a finding of induced infringement. *See United States v. Jinwright*, 2012 U.S. App. LEXIS 12818, at *17 (4th Cir. Jun. 22, 2012) (citing *United States v. Martin*, 773 F.2d 579, 584 (4th Cir. 1985)).

Furthermore, to the extent Suprema/Mentalix (Br. 25-28) and Google (Br. 6-15) semantically attempt to distinguish “deliberate action” from “deliberate

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inaction” in *Global-Tech*’s requirement for “willful blindness,” these arguments are directly contrary to *Global-Tech*’s reasoning. First, the Supreme Court in *Global-Tech* expressly acknowledged that “willful ignorance,” *i.e.*, willful inaction, can satisfy the willful blindness requirement by a defendant deliberately shielding itself from knowledge of the critical facts of the high probability of wrongdoing. *See Global-Tech*, 131 S. Ct. at 2069 (while *Spurr v. United States*, 174 U.S. 728, 735 (1899), did not “us[e] the term ‘willful blindness,’ [it] endorsed a similar concept. The case involved a criminal statute that prohibited a bank officer from ‘willfully’ certifying a check drawn against insufficient funds. We said that a willful violation would occur ‘if the [bank] officer purposely keeps himself in ignorance of whether the drawer has money in the bank.’”).

Similarly, Suprema was well-aware of the ’562 patent (which was also asserted in this same Commission investigation) through its research of Cross Match’s patents [[]]. In turn, the ’562 patent specifically contained three references to the patent application leading to the ’344 patent (incorporating the application by reference) found to infringe here. Thus, like *Spurr*, here Suprema purposefully kept itself ignorant of, *i.e.*, “deliberately avoided,” knowledge of the incorporated-by-reference ’344 patent found to infringe. Nothing short of willful blindness would reasonably have kept Suprema from

knowing that the '344 patent was highly relevant, and therefore highly probable of being infringed.

Moreover, appellants and Google overlook the importance of the concept of *avoidance* to the *Global-Tech* reasoning. Specifically, the Supreme Court stated that “a willfully blind defendant is one who takes deliberate actions to *avoid* confirming a high probability of wrongdoing and who can almost be said to have actually known the critical facts.” *Global-Tech*, 131 S. Ct. at 2070-71 (emphasis added). Therefore, the primary issue here is whether Suprema deliberately avoided “confirming” the critical facts here of a high probability of wrongdoing. The record evidence demonstrates that Suprema did indeed “deliberately avoid” confirming these critical facts by deliberately ignoring and failing to look up the '344 patent despite the application leading to this patent being clearly cited three times in the specification of the '562 patent, which Suprema admits to having downloaded and reviewed. *See* A316:1:11-14, A318:5:30-34, 39-42, 64-67; A221-25; A303554; A303829-30:129-30.

Neither appellants nor Google cite legal authority for their arguments that there can be no “willful blindness” to show induced infringement of the '344 patent because the '562 patent (which incorporated by reference the patent application leading to the '344 patent) was ultimately found not infringed by the

Commission respondents. *See* Br. 25-29 n.2, 31; Google Br. 14-15; *see also* A204; A24; A244. In fact, case law that has interpreted *Global-Tech* affirmatively states that inducement cannot be “foreclosed as a matter of law [] by the assertion of substantive defenses during litigation[.]” *Dataquill Ltd. v. High Tech Computer Corp.*, No. 08cv543, 2011 U.S. Dist. LEXIS 138565, at *31 (S.D. Cal. Dec. 1, 2011). Accordingly, just because appellants successfully asserted non-infringement of the related ’562 patent during the Commission investigation, this in no way forecloses the Commission’s finding of induced infringement of the ’344 patent based on willful blindness.

Also unavailing are the cases cited by Suprema/Mentalix (Br. 29-32) and Google (Br. 15-17) concerning the impropriety of adversely inferring intent from failure to obtain counsel opinion. First, as appellants admit, these cases wholly relate to willful infringement. *See* Br. 29 (*citing In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007); *Knorr-Bremse Systeme Fuer Nutzfahrzeuge v. Dana Corp.*, 383 F.3d 1337, 1341 (Fed. Cir. 2004); *Broadcom*, 543 F.3d at 699. Moreover, as noted by this Court in *Broadcom*, a failure to obtain counsel opinion goes to the “state of mind” inducement requirement and is “such evidence [that] remains relevant to the [] intent analysis” for inducement. *Broadcom*, 543 F.3d at 699. Accordingly, the Commission properly considered Suprema’s failure to

obtain counsel opinion in its induced infringement analysis as relating to whether it “willfully blinded” itself to knowledge of the ’344 patent.

Finally, Google’s argument (Br. 17-22) that the Commission’s decision will somehow expand the “willful blindness” doctrine is speculative and unfounded. That is, this case involves a specific set of facts where “willful blindness” was properly found by the Commission in accordance with *Global-Tech* and subsequent Federal Court cases. Google’s speculations about the application of the “willful blindness” test to different factual scenarios goes beyond the confines of the case before the Court. In any event, even applied in a similar manner to that applied by the Commission here, any truly innocent inducing infringer, *i.e.*, one who is without any knowledge of its competitors’ patents and technology, will still find appropriate protection under law. In contrast, an infringer with intimate knowledge of its competitor’s patents and technology, as was the case both here and in *Global-Tech*, will face the spectre of “willful blindness.”⁴

⁴ If the Court reverses the Commission’s finding of induced infringement based on “willful blindness,” the Court should remand the case in order for the Commission to decide the alternative, factual issue of whether actual knowledge of the ’344 patent by Suprema was shown by the record evidence to support a finding of induced infringement. The Commission did not decide this factual issue during the investigation. *See* A225.

4. There Is No Requirement That the Commission Find Contributory Infringement in Order to Support a Violation of Section 337 Based on Indirect Infringement

a. The Commission Has Properly and Consistently Exercised Its Authority to Entertain Investigations Alleging a Section 337 Violation Based on Induced Infringement Without Contributory or Direct Infringement by a Respondent

In addressing the Commission's ability to find a violation based on induced infringement, Suprema/Mentalix repeatedly refer to the existence of substantial non-infringing uses for the infringing devices – a concept unique to contributory infringement but not relevant to the concept of induced infringement. *See* Br. 18-23. Appellants argue (Br. 21-24) that there can be no indirect infringement at the time of importation based on inducement without contributory infringement. Contrary to appellants' contention (Br. 21-24), a finding of induced infringement can be made without an associated finding of contributory infringement. *See Erbe Elektromedizin GmbH v. Canady Tech. LLC*, 629 F.3d 1278, 1284 (Fed. Cir. 2010) (a “contributory infringement claim . . . requires a successful plaintiff to prove that the accused product has no substantial non-infringing uses . . . [n]o such requirement, however, exists for induced infringement.”); *see also Cordis Corp. v. Boston Scientific Corp.*, 561 F.3d 1319, 1336-37 (Fed. Cir. 2009) (the Court

affirming a finding of induced infringement without a finding of contributory infringement.).

Essentially, Suprema/Mentalix argue that indirect infringement based on inducement alone does not start until there is direct infringement induced by a respondent, which would always occur after importation, and therefore always provide a basis for a Commission respondent to avoid a violation. Neither the case law, Commission precedent, nor the legislative history of section 337 support appellants' assertion. *See Kyocera*, 545 F.3d 1340 at 1352-54; *Certain Acesulfame Potassium and Blends and Prods. Containing Same*, Inv. No. 337-TA-403, 1999 ITC LEXIS 130, at *149-*162 (Mar. 1999) (unreviewed ALJ finding of no violation considering sole allegation of inducement); *Certain Hardware Logic Emulation Systems and Components Thereof*, Inv. No. 337-TA-383, 1998 ITC LEXIS 64 at *37-*38 (Apr. 1998) ("section 337 does not distinguish between direct, contributory, or induced infringement" as a basis for violation); *see also Certain Integrated Circuit Telecommunication Chips and Prods. Containing Same, Including Dialing Apparatus*, Inv. No. 337-TA-337, 1993 ITC LEXIS 854, at *151 (Aug. 1993) (noting consistent Commission practice of expressly including allegations such as induced and/or contributory infringement within the scope of an investigation).

Any plain reading of section 337(a)(1)(B)(i) shows that it defines a violation when there is importation, the sale for importation, or the sale after importation of “articles that *infringe* a valid and enforceable United States patent. *See* 19 U.S.C. § 1337(a)(1)(B)(i) (emphasis added). Contrary to appellants’ assertion (Br. 17-24), the statute does not say articles that “directly or contributorily infringe” but simply articles that “infringe.” Accordingly any theory of infringement alone, *i.e.*, direct, induced, or contributory, may satisfy the statute’s definition for a violation of section 337. And since the Commission found, as supported by substantial evidence, that Suprema induced Mentalix’s direct infringement of the ’344 patent, it then properly determined that both Commission respondents violated section 337 consistent with the plain reading of the statute.

This Court, of course, “must give effect to the unambiguously expressed intent of Congress.” *See Chevron U.S.A. Inc. v. NRDC*, 467 U.S. 837, 843 (1984); *Enercon GmbH v. U.S. Int’l Trade Comm’n*, 151 F.3d 1376, 1381 (Fed. Cir. 1998). From the face of section 337, it is clear that Congress intended for the Commission to find a violation when, as here, there is importation into the United States of articles that “infringe,” either directly or indirectly, a U.S. patent, where indirect infringement may be inducement alone.⁵ This Congressional intent is also

⁵ If the language of section 337 were deemed to be ambiguous, or silent, there can be no question that the Commission’s interpretation is permissible. *See Chevron*, 467 U.S. at 843.

demonstrated in the legislative history, which expressly states that the intent of this section, where the “patent infringement” language was introduced during the 1988 amendments, is to protect “U.S. companies from the importation of articles which *infringe* U.S. intellectual property rights.” *See* S. Rep. No. 100-71, at 128 (1987) (emphasis added). Further, Congress intended that this section protect the U.S. patent owner from “[t]he importation of *any* infringing merchandise [which] derogates from the statutory right, diminishes the value of the intellectual property, and thus indirectly harms the public interest.” *Id.* at 128-29; *see also* H.R. Rep. No. 100-40, at 156 (1987).

Thus, inherently, “articles that infringe” could be expected to involve acts of any type of infringement including direct, contributory, or inducement infringement either by themselves or in any combination. As long as a respondent has been found to infringe under any of these bases, the Commission may find a violation of section 337.

b. The Facts of This Case Demonstrate Why It Is Appropriate to Find a Violation Based Solely on Induced Infringement by a Respondent

With respect to the elements of inducement that involve encouragement or aiding and abetting another’s direct infringement, induced infringement is a continuum that starts as of the time of such encouragement. In this case, the

encouragement occurred well before importation, and continued through the time of importation of the relevant articles in this case. *See* A200329:1138-39, A200330-31:1143-46; A303829-30:129-30, A303844-45:182-87; A303333; A301868:148, A301870:154, A301923:361; A303292; A303011-15; A303236-46; A303754-55:9-13, A303763:42-43; A302963; A200312-13:1070-74; A301962:2, A301965-66:17-19, A301969:30-31, A301973:47-49, A301975:55-56, A301988:124; A200254:838-39; A303226-28; A303727; A303230-32; *see also* *DSU*, 471 F.3d at 1305; *Cross Med.*, 424 F.3d at 1312.

In attacking the Commission's finding of indirect infringement, Suprema/Mentalix ignore several important facts. First, Mentalix's direct infringement here always occurs with Mentalix's integration of its FedSubmit software with Suprema's scanners, which in turn are provided by the act of importation. *See* A103241-42; A200312-13:1070-74; A301962:2, A301965-66:17-19, A301969:30-31, A301973:47-49, A301975:55-56, A301988:124; A200254:838-39; A303226-28; A303727; A303230-32. Moreover, Mentalix's importation of Suprema's scanners includes the importation of associated materials (*e.g.*, SDKs, manuals, source code examples, demonstration programs, and guides), all of which further Suprema's demonstrated encouragement for Mentalix to

infringe the '344 patent. *Ibid.*; *see also* A41; A103229, A103233; A200312-13:1070, 1074; A301966:19; A301972:43; A301991:137; A303670-72.

Indeed, as a factual matter, the record evidence demonstrates the pre-importation communication between Suprema and Mentalix [[

]], that started the continuum of induced infringement, to ensure that the Suprema scanners imported by Mentalix would function with Mentalix's proprietary software, *i.e.*, FedSubmit, to perform the recited features of claim 19 of the '344 patent. For example, the following exchanges occurred between Suprema and Mentalix well before any importation of the relevant scanner products:

[[

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See A303162-73 (emphasis added).

This pre-importation communication directly led to several cooperative efforts between Suprema and Mentalix, including the act of importation, to adapt Mentalix's FedSubmit software to work with Suprema's scanners and SDK to practice the '344 patent. These cooperative efforts included, but were not limited to, the following: (1) modification of Mentalix's FedSubmit software using source

code for the imported scanners provided by Suprema; (2) calling of specific SDK functions using the FedSubmit software to practice claim 19; and (3) demonstrations and testing by Mentalix to ensure successful integration of FedSubmit software and Suprema's scanners and SDK. *See* A200312-13:1070-74; A301962:2, A301965-66:17-19, A301969:30-31, A301973:47-49, A301975:55-56, A301988:124; A200254:838-39.

Accordingly, based on the above, it is clear that Suprema's inducement of Mentalix to directly infringe the '344 patent, *i.e.*, encouraging and/or aiding and abetting Mentalix's direct infringement, started well before the actual importation of the relevant articles. Further, the violative acts include as well the importation of the scanners along with associated materials. Thus, Suprema's actions satisfy the statutory requirements of indirectly "infringing" at the time of importation.

c. Appellants' Reliance on *Electronic Devices* is Unavailing

There is no merit to appellants' suggestion that the Commission, in *Electronic Devices*, overruled its precedent and suddenly decreed that induced infringement without contributory infringement can no longer form a sufficient basis for a section 337 violation. *See Acesulfame, Hardware Logic, Integrated Circuit*. As an initial procedural matter, Suprema/Mentalix wrongly state (Br. 22)

that the ALJ's finding of no indirect infringement in *Electronic Devices* was not on review before the Commission. The Commission's opinion in that case expressly states that "[w]e find no error in the ALJ's determination that [complainant] did not meet its burden to prove indirect infringement of any asserted patent claim."

Electronic Devices, 2011 ITC LEXIS 2869, at *42; *see also id.*, at *34-36.⁶

Therefore, the Commission confirmed in *Electronic Devices* that a violation based solely on inducement could be found, although under the facts in that case, the Commission agreed with the ALJ that there was no indirect infringement proven.

More specifically, Suprema/Mentalix overlook that the Commission in *Electronic Devices* unambiguously reiterated that indirect infringement, including inducement without contributory infringement, is a valid basis for a section 337 violation. *Electronic Devices*, at *24-25. Thus, the Commission stated:

The word 'infringe' in section 337 derives its legal meaning from 35 U.S.C. § 271, the section of the Patent Act that defines patent infringement. . . . Section 271 defines infringement to include direct infringement (35 U.S.C. 271(a)) and the two varieties of indirect infringement, *active inducement* of infringement and contributory infringement (35 U.S.C. § 271(b), (c)). Thus, section 337(a)(1)(B)(i) covers imported articles that directly *or indirectly* infringe when it refers to

⁶ *See also Electronic Devices*, Comm'n Notice, 2011 ITC LEXIS 1753, at *4 (Sept. 2, 2011) ("the Commission has determined to review the final ID *in its entirety*." (emphasis added)).

‘articles that – infringe.’ We also interpret the phrase “articles that – infringe” to reference the status of the articles at the time of importation. Thus, infringement, direct *or indirect*, must be based on the articles at the time of importation to satisfy the requirements of section 337.

Id. (emphasis added).

Accordingly, *Electronic Devices* reinforces that any type of infringement, including either type of indirect infringement, may by itself constitute a valid basis for a violation of section 337(a)(1)(B)(i). Of further note, *Electronic Devices* is consistent with Federal Circuit precedent that confirms that indirect infringement, including inducement without contributory, is indeed a sufficient basis for a section 337(a)(1)(B)(i) violation. *See Kyocera*, 545 F.3d at 1352-54 (the Court reviewed the “intent” element of induced infringement, notwithstanding that the Commission did not find direct or contributory infringement by the respondents, in determining whether to affirm the Commission’s finding of a section 337 violation).

B. The Commission Correctly Construed the “Detecting Area” and “Detecting Shape” Limitations of the ’344 Patent and Based Infringement on Application of the Correct Claim Construction

Steps 19(e) and 19(f) of the ’344 patent claim the following:

(e) detecting a fingerprint area **based on a concentration of black pixels in the binarized fingerprint image;**

(f) detecting a fingerprint shape **based on an arrangement of the concentrated black pixels in an oval-like shape in the binarized fingerprint image;**

A297:19:31-36 (emphasis added). As this Court has instructed, when interpreting claims, the reviewing tribunal “‘should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history.’” *W.E. Hall Co. v. Atlanta Corrugating, LLC*, 370 F.3d 1343, 1350 (Fed. Cir. 2004) (*quoting Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)). In accordance with these teachings of this Court, the ALJ properly construed steps (e) and (f) based on the intrinsic record. *See Vitronics*, 90 F.3d at 1582; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005).

Based on the correct construction of the claim 19, the ALJ properly found that the Commission respondents’ accused devices infringed. Under this construction, the undisputed facts show that the accused scanner products using

FedSubmit software infringe claim 19 of the '344 patent since: (1) a mere bounding box (as used in the accused device) can be used to determine the actual area of a fingerprint image since it detects the fingerprint area containing the highest concentration of black pixels which is all this is required for step (e); and (2) the same bounding box can be used to detect concentrations of black pixels arranged in oval-like shapes to determine fingerprint shape since this limitation does not specifically require that "oval-like pixel concentrations be *identified*." See A127-31; Br. 32-41. Suprema/Mentalix do not dispute infringement under the ALJ's construction. Instead, they improperly attempt to construe the claims in their own favor by reference to the accused devices (Br. 32-41). See *NeoMagic Corp. v. Trident Microsystems*, 287 F.3d 1062, 1074 (Fed. Cir. 2002).

Notwithstanding appellants' attempt to narrow the claim scope (Br. 34-41), the plain language of the claim steps 19(e) and 19(f) merely recites "detecting a fingerprint area based on a concentration of black pixels," and "detecting a fingerprint shape based on an arrangement of the concentrated black pixels in an oval-like shape," respectively. Therefore, the claim language and patent specification clearly teach that fingerprint area and shape may be determined by simply detecting concentrations of black pixels, *e.g.*, using a box bounding the

black pixels. Accordingly, as the ALJ properly found, a box bounding either the concentration of black pixels, or a concentration of black pixels comprising oval-like shapes, is consistent with the specification and therefore satisfies these claim limitations. *See* A127-31.

Contrary to appellants' assertion (Br. 38-39), the ALJ applied the same claim constructions (of steps 19(e) and 19(f)) for his infringement and invalidity determinations concerning the '344 patent. *See* A156-58 ("the [ALJ] construed [step (c) of claim 1] to mean 'identifying concentrations of black pixels, which have oval-like shapes, to determine individual fingerprint areas and shapes.'"); *see Kim v. ConAgra Foods, Inc.*, 465 F.3d 1312, 1324 (Fed. Cir. 2006).

1. The ALJ Correctly Construed Claim 19(e)

The ALJ's construction of claim step 19(e), *i.e.*, detecting a fingerprint area based on a concentration of black pixels, was in accordance with law and should be affirmed. A127-28. Contrary to appellants' argument (Br. 36) the ALJ did not conflate detection of fingerprint area and shape. Rather, the ALJ correctly heeded the plain language of the claim and clear teaching of the specification that the concentrations of black pixels should be used to determine these qualities of the captured fingerprint. *See* A297:19:31-36; A295:15:43-49.

The '344 patent specification describes that “[i]n step 708, a fingerprint area is detected. Usually, the black areas of the image are concentrated around the fingerprints. Thus, the detection step detects the areas concentrated by black pixels.” See A295:15:43-46. As the ALJ correctly found, the plain language of the claims and the specification do not place any narrowing limitations on the scope of step (e), and therefore a mere bounding box can be used to find the concentrations of black pixels and detect fingerprint area to satisfy this claim step. See A127-31; *Linear Tech. v. U.S. Int’l Trade Comm’n*, 566 F.3d 1049, 1057-58 (Fed. Cir. 2009) (“there is no ‘clear intention [from the specification] to limit the claim scope using ‘words or expressions of manifest exclusion or restriction,’ which is necessary to further narrow the claim language.”) (citing *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1206 (Fed. Cir. 2010) (“the de-fendant’s proposed construction would *unjustifiably narrow* the term’s broad scope, which was not explicitly limited or redefined by the specification.”) (emphasis added).

2. The ALJ Correctly Construed Claim 19(f)

The ALJ properly construed step (f), similar to claim step 1(c), to mean “identifying concentrations of black pixels, which have oval-like shapes, to

determine individual fingerprint areas and shapes.” The ’344 patent specification states the following in reference to the fingerprint image processing performed in

Fig. 7:

In step 708, a fingerprint area is detected. Usually, the black areas of the image are concentrated around the fingerprints. Thus, the detection step detects the *areas concentrated by black pixels*. In step 710, fingerprint shapes are detected. The fingerprint shapes *can be* oval-like shapes. The fingerprint shape detection step detects the areas *concentrated by black pixels* that are comprised of oval-like shapes.

A295:15:43-49 (emphasis added).

This passage clearly describes detecting fingerprint area simply by *using concentrations of black pixels*. The passage also describes detecting fingerprint shape by detecting the area concentrated by black pixels which *can be* oval-like shapes. *Id.* The patent thus describes using the concentrations of black pixels regardless of the pixel shape, rather than locating oval-like shapes, for detecting fingerprint shape. *See Vitronics*, 90 F.3d at 1582 (“the specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.”). As such, the ALJ correctly followed the plain language of the claim and clear teaching of the

specification to use the concentrations of the black pixels to determine these qualities of the captured fingerprint. *See* A297:19:31-36; A295:15:43-49.

In contrast to the straightforward approach taken by the ALJ, Suprema/Mentalix's reasoning concerning the "detecting fingerprint shape" of step (f) is circular. *See* Br. 36-39. That is, their argument would first require determining the shape of the fingerprint, *i.e.*, an oval, and only then using that shape to determine the shape of the fingerprint, which is already known to be an oval. Moreover, contrary to appellants' attempts to require computerized shape determination for step (f) (Br. 38), nothing in the intrinsic record requires detecting shapes using a "computerized shape determination based on tracing the outline of an image." *See Linear Tech.*, 566 F.3d at 1057-58; *Finjan*, 626 F.3d at 1206.

Although Suprema/Mentalix refer to the prosecution history (Br. 41), their efforts in this vein are unavailing since there is no "clear and unmistakable" disclaimer of claim scope. *See* A310728; *Epistar v. U.S. Int'l Trade Comm'n*, 566 F.3d 1321, 1335-36 (Fed. Cir. 2009); *Cordis Corp.*, 561 F.3d at 1329 ("A disclaimer must be 'clear and unmistakable[.]'"); *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1124 (Fed. Cir. 2004) ("it is the applicant, not the examiner, who must give up or disclaim subject matter that

would otherwise fall within the scope of the claims.”). In other words, nothing in the intrinsic record specifically limits the claimed invention to detecting shape using pixels that must be of oval-like shape. In fact, there is no mention whatsoever of “oval-like shape” in the ‘344 patentee’s remarks to the examiner. Also unavailing is appellants’ reference (Br. 39 n.3) to an apparent challenge to the Commission’s finding that the ‘344 patent is not invalid, as this issue has not been properly raised in this appeal.⁷

Based on the above, the ALJ’s claim constructions and finding of infringement for claim 19 should be affirmed as they are supported by substantial evidence and in accordance with law.

⁷ As clear from appellants’ statement of the issues, they are not appealing the Commission’s validity findings for the ‘344 patent. *See* Br. 2-3; A164-67. Appellants’ passing reference to the ALJ’s non-invalidity finding for claim 19 at the bottom of page 38 (and n.3) of their brief does not bring invalidity of this claim into play for the purposes of this appeal. *See SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1320 (Fed. Cir. 2006) (“An issue is waived unless a party raises it in its opening brief, and for those purposes ‘a passing reference to an issue . . . will not suffice to bring that issue before this court.’”) (citations and quotations omitted); *see also Otsuka Pharmaceutical Co., Ltd. v. Sandoz, Inc.*, 678 F.3d 1280, 1294 (Fed. Cir. 2012) (“Arguments raised only in footnotes . . . are waived.”).

III. THE COMMISSION'S DETERMINATION THAT THE COMMISSION RESPONDENTS VIOLATED SECTION 337 WITH RESPECT TO THE '993 PATENT IS SUPPORTED BY SUBSTANTIAL EVIDENCE AND IN ACCORDANCE WITH LAW

A. The Commission Correctly Construed the "Optical System" Limitation of the '993 Patent Consistent with the Intrinsic Record

As supported by the intrinsic record, the ALJ correctly construed the claimed "optical system" as not excluding non-lens elements in any recited element of the claim including element 10(d). That element recites "a second lens unit having a positive power for forming a real image of the object, said second lens unit being on the image side of the first lens unit." A261:10:29-3.

Suprema/Mentalix's argument to the contrary (Br. 42-49) overlooks that the claim construction must take into account the plain language of the claims. The plain language of claim 10 of the '993 patent refers to an "optical system . . . said system forming an image of an object and comprising," and not a "lens system" as appellants purport. Accordingly, there is no specific mention to a "lens system," but rather to the broadly claimed "optical system" in the preamble which the ALJ correctly viewed as giving life and meaning to the claim. Of course, the preamble provides an antecedent to later terms in the claim. *See Kropa v. Robie*, 187 F.2d

150, 152 (C.C.P.A. 1951). Therefore, in accordance with the plain language of the claim and relevant law, “optical system” is the primary limitation of claim 10.

Turning to the '993 patent specification, there is no clear disavowal of non-lens elements within the claimed optical system, but rather this “optical system” term is consistently described as open-ended, *i.e.*, using the term “comprising,” with only the recited elements acting as limits on claim scope. *See* A257:1:58-61, 2:53-56. Nothing in the intrinsic record supports appellants’ contention that although the broader claimed “optical system” may include non-lens elements, the lens system, included within the optical system, may not. Disclaimer of claim scope in the specification requires words of “clear and unmistakable disavowal” that make it clear, to one of ordinary skill in the art, that the patentee does not consider a specifically disclaimed element part of the claimed invention. *See Epistar*, 566 F.3d at 1335-36; *Cordis Corp.*, 561 F.3d at 1329 (“A disclaimer must be ‘clear and unmistakable[.]’”).

Here, almost the entirety of the specification describes and claims an open-ended “optical system” that Suprema/Mentalix did not dispute may contain non-lens elements. *See* A257:1:58-61, 2:53-56; A58-61, A65. The specification includes only a single object of the invention, and a single instance of prior art

criticism, that make general reference to a lens system employing only lens elements. A257:1:23-28, 48-51. A single object of the invention (out of four) and a single instance of general criticism of non-lens elements is not conclusive evidence of a “clear and unmistakable” intention to disclaim non-lens elements from the lens system included within the overall, broadly claimed “optical system.” *See Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc.*, 334 F.3d 1294, 1301 (Fed. Cir. 2003) (“The objective described is merely one of several objectives that can be achieved through the use of the invention; the written description does not suggest that the invention must be used only in a manner to attain that objective.”).

Moreover, the intrinsic record establishes that the '993 patent discloses and claims an “optical system,” comprising, *i.e.*, including, but not limited to, a number of elements including lens elements in certain positions. Nothing in the specification precludes other elements, *i.e.*, non-lens elements, from also being included as long as the recited elements are satisfied. Because nothing in the intrinsic record manifestly or unmistakably limits claim scope, one of ordinary skill in the art would understand that the claims here are entitled to the full scope given to them by their clear language and ordinary meaning. *See Phillips*, 415 F.3d at 1312 (“we look to the words of the claims themselves . . . to define the

scope of the patented invention.”) (*quoting Vitronics*, 90 F.3d at 1582). Disclaimer of claim scope requires the patentee to criticize or distinguish the prior art to the extent that he or she has specifically defined the particularly disclosed embodiment, which excludes the relevant element, as the “invention.” *See SciMed Life Sys., Inc. v. Adv. Cardiovascular Sys.*, 242 F.3d 1337, 1340-45 (Fed. Cir. 2001). This level of disclaimer is simply not present here, especially where the claimed “optical system” is defined in a consistent, open-ended manner throughout the specification.

Accordingly, the Commission correctly declined to view any of the claim limitations 10(c)-(e), including “said second lens unit being on the image side of the first lens unit,” as excluding non-lens elements between the first and second lens units. Under this proper construction, the accused devices infringe claims 10, 12, and 15 of the ’993 patent. *See* A102-12.

B. Appellants Fail to Show That the Commission’s Claim Construction is Incorrect

During the underlying Commission investigation, Suprema/Mentalix solely asserted a “general” claim construction argument that the asserted claims of the ’993 patent, *e.g.*, the “optical system” limitation, precluded the use of any non-lens elements or off-axis optics. A57-67. Before the full Commission in their petition

for review, they narrowed their argument to the “first lens unit” of element 10(c) to contend that, properly construed, there could be no non-lens element or off-axis optics in between “the aperture stop and the prism.” A102617-27. Now in their brief on appeal, Suprema/Mentalix take a third approach, arguing that, properly construed, the “second lens unit” of element 10(d) precludes any non-lens elements or off-axis optics in between the first lens unit and the second lens unit. Br. 42-49. Having argued otherwise before the ALJ and the full Commission, Suprema/Mentalix should be deemed to have waived their new claim construction. *See NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1296 (Fed. Cir. 2005) (“presenting proposed claim constructions which alter claim scope for the first time on appeal invokes the doctrine of waiver as to the new claim constructions.”) (*citing CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1370 (Fed. Cir. 2002)); *NeoMagic*, 287 F.3d at 1074; *SRI Int’l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1118 (Fed. Cir. 1985).

Although Suprema/Mentalix cite one example after another from the claim language, these contentions simply do not support their claim construction that the proper construction of the claim 10 precludes any non-lens elements or off-axis optics in-between the recited lens units or lens elements (*e.g.*, prism). At bottom,

as discussed in detail *supra*, nothing in the intrinsic record indicates that the patentee clearly disclaimed the use of non-lens elements in-between the claimed lens units or lens elements. *See Epistar*, 566 F.3d at 1335-36; *Brookhill-Wilk*, 334 F.3d at 1301.

Again, there is nothing about the claim language itself, *i.e.*, “said second lens unit being on the image side of the first lens unit,” requiring that *only* the second lens unit be placed on the image side of the first lens unit with nothing in-between. Further, claim 10 calls for an optical system “comprising” certain elements be placed in certain positions, and therefore allows for other elements in addition to those specifically recited. *See CIAS, Inc. v. Alliance Gaming Corp.*, 504 F.3d 1356, 1360 (Fed. Cir. 2007) (“In the patent claim context the term ‘comprising’ is well understood to mean ‘including but not limited to.’”). Moreover, as described *supra*, nothing in the specification, or certainly nothing rising to the level of a “clear, unmistakable” disclaimer, precludes the use of non-lens elements being placed in-between the recited lens units or elements. *See Epistar*, 566 F.3d at 1335-36; *see also Cordis Corp.*, 561 F.3d at 1329.

Further, appellants’ references (Br. 47-48) to two cases, *SciMed* and *Astrazeneca AB v. Mut. Pharm. Co.*, 384 F.3d 1333, 1339-40 (Fed. Cir. 2004), are

inapposite here. Those cases involved a single disclosed embodiment where this sole embodiment was described as the invention itself or a critical feature of the invention, while at the same time other embodiments were criticized and distinguished. In contrast, here the '993 patent specification describes a plurality of embodiments and does not criticize or distinguish all other embodiments to leave just one as the invention itself. A248-50:Figs. 1A-1B, A252:Fig. 2A, A254-56:Figs. 3-5; A257:1:58-61, 2:53-55) ("the invention in accordance with a first of its aspects . . .", "[i]n accordance with a second of its aspects, the invention . . ."); A258:3:32-47, 57-60.

Accordingly, appellants' arguments do not show error in the Commission's construction of "optical system" leading to its undisputed infringement finding that is supported by substantial evidence. *See* Br. 49-50; A102-14.

IV. THE ALJ PROPERLY FOUND THAT APPELLANTS FAILED TO PROVE OBVIOUSNESS OF THE '993 PATENT

A. The ALJ's Findings Are Supported by Substantial Evidence and in Accordance with Law

Contrary to Suprema/Mentalix's contention (Br. 51-67), they did not prove, by clear and convincing evidence, that the claimed "first lens unit" limitation of the '993 patent is obvious in view of the asserted prior art combination, *i.e.*, the '060

and '051 patents. An obviousness inquiry involves consideration of several factors, such as demands of the market and the technical community, interrelated teachings of multiple patents, background knowledge of one skilled in the art, inferences and creative steps one skilled in the art would employ, to determine whether one of ordinary skill would have found a reason to combine references in the fashion claimed by the patent at issue. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417-19 (2007); *see* 35 U.S.C. § 103(a). However, if “when combined, the references ‘would produce a seemingly inoperative device,’ then they teach away from their combination.” *Tec Air, Inc. v. Denso Mfg. Mich. Inc.*, 192 F.3d 1353, 1360 (Fed. Cir. 1999) (citations omitted); *see also In re Icon Health & Fitness, Inc.*, 496 F.3d 1374, 1382 (Fed. Cir. 2007).

Applying this law, the ALJ correctly found that the '993 patent is non-obvious in view of the asserted prior art. As the ALJ explained, Suprema/Mentalix failed to show, by clear and convincing evidence, that the asserted '060 prior art patent discloses claim elements 10(c), 10(d), and 10(e), especially a lens unit that creates a telecentric condition between a prism and an aperture stop as required by element 10(c). A152-55. The Court should uphold this finding, as appellants' argument is basically a classic reconstruction from the invention itself, working

back and piecing together the prior art references to reach the result the invention produced.

First, regarding element 10(c) of the '993 patent, *i.e.*, a first lens unit having a positive power, the record evidence established that only lens **14** of the '060 patent may be considered as forming a telecentric entrance pupil since the reference describes lens **14** as forming parallel rays of light. A302027:3:1-3 ("a lens **14** for deflecting the light beams **16** into parallel relationship one with respect to another"). In contrast, with respect to lens **28**, there is no corresponding disclosure that clearly and convincingly describes the light rays entering lens **28** as parallel. A302027:3:38-40. Rather, the '060 patent specification merely states that "[t]he reflected light comes out through face **24** of the prism and is focused with an achromatic lens **28** through a diaphragm **30** onto an inclined focal plane **32**," which does not disclose placing the aperture stop at the focal point of lens **28** to form a telecentric entrance pupil as defined by both parties. *Id.*; *see* A103233.

Accordingly, contrary to appellants' assertion (Br. 54-58), there is no mention of lens **28** forming parallel rays of light or a telecentric objective, and therefore lens **28** cannot satisfy element (c) of claim 10. Moreover, lens **14** of the '060 patent also cannot satisfy element (c) because the '060 patent discloses that

lens **14** is located on the object side of the prism **18**, and not located between the prism **18** and aperture stop **30** as required by this claim limitation. A302023:Fig. 1; A302026-27:2:74-3:38.

Further, the evidentiary record does not indicate any reason why one of ordinary skill in the art would have substituted the lens system for a camera of the '051 patent into the fingerprint detection device of the '060 patent. A153-54. Suprema/Mentalix did not provide any detailed, reasonable motivation to combine for their obviousness argument. Rather, they provided only "conclusory generalizations" and a stringing together of elements of the invention that are allegedly present in the cited prior art, without offering any specific analysis or explanation. *See Perfect Web Techs., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329-30 (Fed. Cir. 2009). In addition to these flaws, appellants' argument lacked any of the traditional required elements of a proper obvious analysis, such as any detailed discussion of the factors taught in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

At bottom, Suprema/Mentalix merely provided conclusory generalizations and improper hindsight reasoning that certainly are not supported by clear and convincing evidence. They also omitted any specific evidence on how to combine

distinct lens units, *i.e.*, a fingerprint optical lens system for a biometric scanner and a camera lens system, into an operable combination for a biometric fingerprint optical detection system. *Tec Air*, 192 F.3d at 1360; *see* A152-55 (*citing* A200365).

Accordingly, the Commission's determination of non-obviousness of the '993 patent was in accordance with law and supported by substantial evidence, and therefore should be affirmed by the Court.

B. Appellants Fail to Show That the Commission's Non-Invalidity Finding Was Anything But Reasonable and Proper

Suprema/Mentalix repeatedly attempt (Br. 56-58) to rely on Fig. 1 of the '060 prior art patent reference to prove obviousness of the '993 patent, *i.e.*, the claimed "first lens unit" limitation of element (c). However, appellants cannot rely merely on a prior art figure, without support from the written description, to assert that lens 28 of the figure forms a telecentric entrance pupil to prove disclosure of the required feature at issue. *See Hologic*, 639 F.3d at 1338-39 (reversing the lower court's summary judgment of invalidity because the prior art figure solely relied on by the alleged infringer "d[id] not clearly show *asymmetry* about [a] longitudinal axis.") (emphasis added); *Hockerson-Halberstadt*, 222 F.3d at 956 ("patent drawings do not define the precise proportions of the elements and may

not be relied on . . . if the specification is completely silent on the issue.”). Rather, a mere figure, without a corresponding supporting description in the written specification or clear indication in the figure, cannot be used to prove disclosure of a specific parameter of a figure (*e.g.*, a parallel relationship between two elements as in this case). *Id.*

Similar to *Hologic*, here Suprema/Mentalix attempt to solely rely on a figure for invalidity without any clear and convincing showing that the particular physical parameter/relationship (*e.g.*, parallelism) is disclosed by the figure. Undisputed by appellants, there is no disclosure in the written specification of the '060 patent that describes lens **28** as receiving parallel beams of light and forming a focal point at the aperture stop **30** in Fig. 1 to constitute a telecentric entrance pupil as required. Without that corresponding written disclosure, there can be no clear and convincing evidence of a first lens unit forming a telecentric entrance pupil as required by claim 10 of the '993 patent.

Suprema/Mentalix simply provide conclusory generalizations and no detailed explanation for how and why one of ordinary skill would combine the '060 and '051 patents to form an operable combination that provides the recited invention. For example, Suprema/Mentalix (Br. 53, 63-64) fail to demonstrate

how one of ordinary skill would combine lens **28** from the '060 patent – which again does not form a telecentric objective as described *supra* – with the camera lens system of the '051 patent to produce the recited first lens unit having positive power. Nor do they account for the fact that the first lens unit (L1) having positive power in the '051 patent is the one furthest from the aperture stop while lens **28** in the '060 patent is the one closest to the aperture stop. *See* A301995 (Fig. 1 of '051 patent); A302023 (Fig. 1 of '060 patent). Appellants cannot simply play “mix-and-match” in their obviousness argument to try and select convenient elements from a plurality of references to combine into the claimed invention without any specific analysis or explanation on how this combination forms an operable mechanism. *See Perfect Web*, 587 F.3d at 1330; *Tec Air*, 192 F.3d at 1360. Their reliance on a mere drawing without an associated disclosure in the written specification does not establish obviousness. *See Hockerson-Halberstadt*, 222 F.3d at 956; *Hologic*, 639 F.3d at 1338-39.

Moreover, Suprema/Mentalix overlook their burden and twist the substantial evidence standard to suggest that the Commission finding should be overturned as long as they can point to other evidence that supports their view. *See* Br. 58 (“there is no substantial evidence to the contrary.”). It goes without saying that

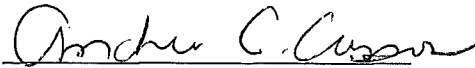
this is not the correct standard. Rather, for any “relevant evidence [that] a reasonable mind might accept as adequate to support a conclusion,” the Court must uphold the agency’s factual finding as long as such substantial evidence supports it. *See Universal Camera Corp. v. NLRB*, 340 U.S. 474, 477 (1951); *Akzo N.V. v. U.S. Int’l Trade Comm’n*, 808 F.2d 1471, 1479 (Fed. Cir. 1986) (“The mere fact that a reasonable person might reach some other conclusion is insufficient for this court to overturn the agency’s conclusion.”).

Moreover, in accordance with 35 U.S.C. § 282 and *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359-60 (Fed. Cir. 1984), it is the burden of the party raising the invalidity defense – here Suprema/Mentalix – to prove obviousness by clear and convincing evidence. As demonstrated, they have not done so here.

CONCLUSION

For the foregoing reasons, the Court should affirm the Commission’s final determination finding a violation of section 337 by reason of infringement of claims 10, 12, and 15 of the ’993 patent and claim 19 of the ’344 patent.

Respectfully submitted,



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August 20, 2012

CERTIFICATE OF SERVICE

I, Andrea C. Casson, hereby certify on this 20th day of August 2012 that true and correct copies of the attached confidential and nonconfidential **BRIEF OF APPELLEE UNITED STATES INTERNATIONAL TRADE COMMISSION** were served via Federal Express upon the following:

On behalf of Cross Match Technologies, Inc.:

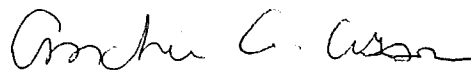
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On behalf of Google Inc. (nonconfidential version only):

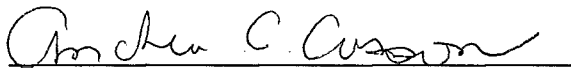
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**CERTIFICATE OF COMPLIANCE
PURSUANT TO FED. R. APP. P. 32(a)(7)(C)**

Pursuant to Fed. R. App. P. 32(a)(7)(B), I hereby certify that the attached brief contains 13,745 words, according to the word-count function of the word-processing system used to prepare the brief (Word Perfect X5).


Andrea C. Casson

Dated: August 20, 2012